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ANNALE VAN DIE SUID-AFRIKAANSE MUSEUM

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THE SOUTH AFRICAN MUSEUM'S *MEIRING NAUDE* CRUISES
PART 1
STATION DATA 1975, 1976

Compiled by

ELIZABETH LOUW

Cape Town Kaapstad

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(With 1 figure and 3 tables)

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INTRODUCTION

The benthic and pelagic fauna of the continental shelf of South Africa has received a fair amount of attention in recent years, from the University of Cape Town, the Sea Fisheries Branch of the Department of Industries, the Oceanographic Research Institute, Durban, and the South African Museum. The fauna of the deeper waters of 500 metres and more, however, especially off Natal, has received less attention. This area, being the western edge of the Indo-Pacific region and a corridor for the Agulhas Current, is of particular interest to marine zoogeographers.

To remedy this situation the staff of the Department of Marine Biology of the South African Museum has embarked on an investigatory programme in the area. With the limited financial resources at the Museum's disposal it became obvious that seasonal and quantitative studies would not at first be possible. The 1975 and 1976 cruises are thus regarded as qualitative and exploratory in nature. Nevertheless, as both cruises covered much the same area at the same time of year, valuable commentary can be made on the general composition of the fauna.

THE CRUISES

With the aid of grants from the South African National Council for Oceanographic Research (SANCOR) and with assistance from the South African Museum, two ten-day cruises were undertaken. These took place from 22 to 31 May 1975 and from 17 to 26 May 1976 on board the Durban-based C.S.I.R. research vessel *Meiring Naude*. A total of 115 stations was

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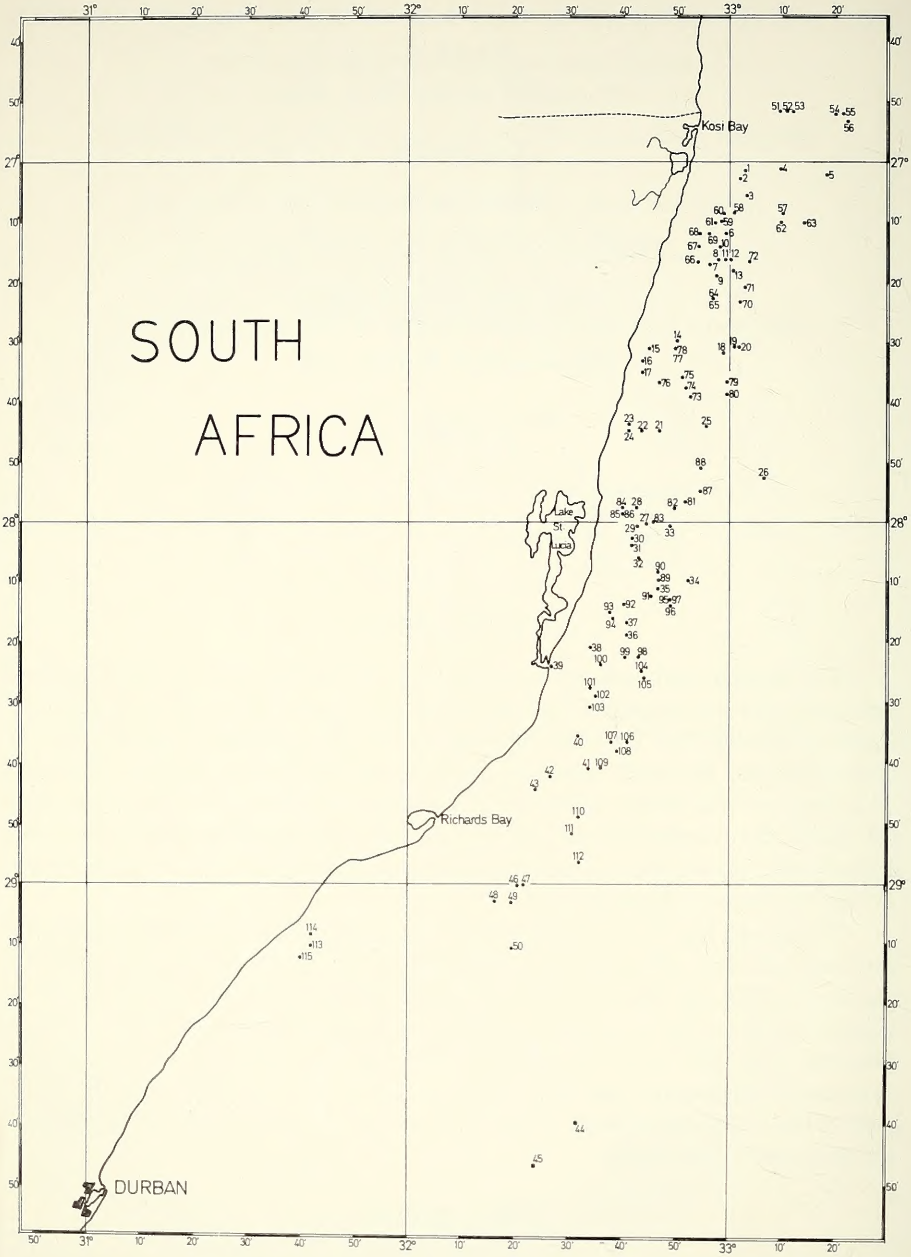

Fig. 1. Chart of the area sampled during the 1975 (stations SM 1–50) and 1976 (stations SM 51–115) cruises of the South African Museum on the R/V *Meiring Naude*.

occupied, designated by the prefix 'SM', from 26°51'S to 29°49'S (see Fig. 1), in bottom depths ranging from 18 to 1 400 metres. Most of the stations were in depths of more than 600 metres.

The following gear was employed:

Indian Ocean Standard Net (IOSN)

N100H net

B57 Bongo net (0,505 mm mesh) (King & Robertson 1973)

Neuston net

10 ft (3,048 m) Isaacs-Kidd midwater trawl (IKMT) (King & Iversen 1962)

8 m^2 Rectangular midwater trawl (RMT) (fixed open mouth) (Clarke 1969; Baker, Clarke & Harris 1973)

18 ft (5,486 m) Beam trawl

Agassiz trawl

Heavy steel dredge

Light biological dredge (Menzies 1962).

The biological material collected is housed in the South African Museum, with duplicate fish material in the J. L. B. Smith Institute of Ichthyology, Grahamstown.

Animal groups not yet being dealt with include Gasteropoda, Pelecypoda, Scaphopoda, Brachiopoda, Anthozoa, Euphausiacea, Mysidacea, Tanaidacea, sponges, Polyzoa, and most of the planktonic groups. Information on the composition, size and availability of these groups may be obtained from the Head of the Department of Marine Biology, South African Museum.

All station data are contained in the following tables. Papers dealing with various collections from the 1975 and 1976 cruises will give station numbers only, and will refer to the present paper for further data.

NOTES FOR TABLES 1 & 2

Bathythermograph column indicates the depth range (m) over which temperature profiles were obtained using an electronic temperature/depth Underwater Instrument (Snyman 1976). Table 3 provides temperature data from these profiles for selected depths.

S, D & N following SM numbers, e.g. SM 51S, SM 51D and SM 51N, indicate shallow Bongo, deep Bongo and Neuston net hauls respectively, at the same station.

* Ship's speed at 0 knots for most of haul due to drag on net.

** Bathythermograph damaged—temperature data was obtained for depths 1 000–640 m only.

† Refer to Bathythermograph for previous station.

†† Refer to Bathythermograph for the following station.

‡ RMT was fished in a stepped haul. Sea surface temperature and ship's speed are averaged for the complete haul.

TABLE 1

Station data for the first cruise, 22–31 May 1975

Station No.	*Position*		*Time*			*Date*	*Bottom Depth*	*Fishing Depth*	*Gear*	*Bathy-thermo-graph*	*Sea surface temp.*	*Ship's speed*
	Latitude	*Longitude*	*Start*	*Fishing*	*End*							
	°S	°E					m	m		m	°C	knots
SM 1	27°00,8′	33°03,1′	1141	1212–1222	1240	23.5.75	688	688	Dredge	—	25,0	0,25
SM 2	27°02,4′	33°02,9′	1322	1346–?		23.5.75	724	580–0	IOSN	588–0	25,05	0,20
SM 3	27°05,0′	33°03,1′	1508	1533–1626	—	23.5.75	820	820	Beam trawl	—	24,85	1,9
SM 4(i)	27°01,0′	33°10,0′	—	1857–1912		23.5.75	860	650–0	IOSN	844–8	24,25	0,10
SM 4(ii)			—	1924–1940			860	450–0	IOSN		24,30	0,10
SM 5	27°02,7′	33°18,4′	2115	2137–2235	2251	23.5.75	940–960	450–0	IKMT	876–0	23,9	2,15
SM 6(i)	27°12,0′	32°59,2′	0624	0627–0702		24.5.75	840	650–0	IOSN	828–0	24,30	0
SM 6(ii)			0712	0717–0724			840	300–0	IOSN		24,28	0
SM 7	27°17,3′	32°55,9′	0842	0915–1015	—	24.5.75	840–710	840–710	Beam trawl	—	24,21	2,32
SM 8	27°16,6′	32°58,0′	1258	1322–1345	1350	24.5.75	900	650–0	IOSN	822–0	24,04	0
SM 9	27°18,7′	32°57,8′	1410	1437–1450	1513	24.5.75	840	840	Dredge	—	24,00	0,2
SM 10	27°14,8′	32°58,0′	1605	1630–1700	—	24.5.75	900	900	Dredge	—	24,12	0
SM 11	27°16,0′	32°59,6′		1815–1840		24.5.75	910	150	Bongo	400–0	23,9	2,05
SM 12	27°16,0′	33°00,5′		1855–1925		24.5.75	—	200	Bongo		23,85	2,12
SM 13	27°18,5′	33°05,0′		2014–2039		24.5.75	1 100	274	Bongo	400–0	23,80	1,80
SM 14	27°30,6′	32°50,6′		0648–0720		25.5.75	800	247	Bongo	772–0	23,65	1,80
SM 15	27°31,0′	32°45,6′	0839	0904–0935	—	25.5.75	454–280	454–280	Beam trawl	—	24,15	2
SM 16	27°33,0′	32°44,6′	1109	1126–1145	1200	25.5.75	376–384	384	Dredge	—	24,33	0,15
SM 17	27°35,4′	32°44,2′		1257–1320		25.5.75	380	236	Bongo	400–0	24,50	1,83
SM 18	27°32,5′	32°59,0′	1818	1852–1940	2005	25.5.75	1 120	600	IKMT	828–0	24,35	range 1,75–2,60
SM 19	27°31,8′	33°01,6′		2045–2106		25.5.75	1 126	226	Bongo	†	24,45	1,35
SM 20	27°31,2′	33°02,1′		2115–2206		25.5.75	1 100	528	Bongo	††	24,49	1,36
SM 21	27°45,2′	32°47,6′		0657–0720		26.5.75	800	259	Bongo	504–0	24,45	1,51
SM 22	27°45,0′	32°44,8′	0835	0901–0931	—	26.5.75	700–492	700–492	Beam trawl	—	24,50	range 1,55–2,25
SM 23	27°44,4′	32°42,8′	1025	1040–1105	1125	26.5.75	450–400	450–400	Dredge	—	24,42	0

SM 24	27°45,0′	32°42,5′		1235–1255		26.5.75	580	223	Bongo	290–0	24,77	1,53
SM 25	27°44,7′	32°56,8′	1647	1710–1748		26.5.75	1 140–1 340	600	IKMT	326–0	24,53	range 2,1–3,4
				1838–1910	—			376			23,45	range 0,5–1,65
SM 26	27°53,5′	33°07,1′		2024–2045		26.5.75	1 270	212	Bongo	†	22,95	1,77
SM 27	28°00,5′	32°45,4′		0645–0704		27.5.75	820	212	Bongo	324–0	24,80	1,67
SM 28	27°58,9′	32°43,9′	0832	0900–0940	1010	27.5.75	724–560	724–560	Beam trawl	520–0	24,60	range 1,5–2,25
SM 29	28°00,8′	32°40,5′	1051	1104–1150	1200	27.5.75	600	600	Beam trawl	—	24,80	range 2,25–2,55
SM 30	28°03,7′	32°42,0′		1235–1258		27.5.75	720	212	Bongo	500–0	24,50	1,75
SM 31	28°04,5′	32°42,8′	1306	1324–1344	1406	27.5.75	740	740	Dredge	—	24,55	0,15
SM 32	28°06,2′	32°43,5′	1417	1432–1502	1519	27.5.75	730–750	730–750	Dredge	—	24,72	0,20
SM 33	28°00,9′	32°49,8′	1635	1700–1900	1918	27.5.75	1 000	400	IKMT	††	24,60	range 2,0–2,5
SM 34	28°10,3′	32°53,5′		1959–2021		27.5.75	1 240	212	Bongo	650–0	24,65	1,71
SM 35	28°11,3′	32°47,8′	2102	2132–2150	2225	27.5.75	1 000	1 000	Dredge	—	24,62	0,1
SM 36	28°19,2′	32°41,4′		0653–0714		28.5.75	800	214	Bongo	500–0	24,52	1,95
SM 37	28°17,4′	32°41,3′	0835	0900–0932	1000	28.5.75	680–660	680–660	Beam trawl	—	24,30	range 1,2–2,4
SM 38	28°21,9′	32°34,6′	1025	1057–1155	1230	28.5.75	775–825	775–825	Beam trawl	—	24,30	range 1,75–0
SM 39	28°24,1′	32°26,4′	0820	0823–0837	0841	29.5.75	18	0	N100H	—	22,95	1,5
SM 40	28°36,3′	32°32,2′	1016	1048–1148	1222	29.5.75	825–830	825–830	Beam trawl	—	24,45	0,15
SM 41	28°41,7′	32°34,5′		1326–1348		29.5.75	880	231	Bongo	650–0	24,51	1,73
SM 42	28°43,5′	32°27,0′	1435	1446–1506	1518	29.5.75	430	430	Dredge	—	24,10	0
SM 43	28°45,5′	32°24,5′	1524	1536–1547	1602	29.5.75	420–360	420–360	Dredge	—	24,08	0
SM 44	29°40,6′	32°32,5′	1803	1833–1934	2050	29.5.75	722–768	722–768	Beam trawl	—	24,50	0,15
SM 45	29°49,6′	32°24,7′		2227–2246		29.5.75	670	212	Bongo	500–0	24,48	1,61
SM 46	28°59,3′	32°21,1′		0647–0708		30.5.75	800	212	Bongo	650–0	24,50	1,62
SM 47	28°59,4′	32°21,4′	0842	0858–1055	1115	30.5.75	760–940	400	IKMT	500–0	24,48	range 3,4–4,4
SM 48	29°02,0′	32°16,0′		1158–1220		30.5.75	960	212	Bongo	†	24,33	1,50
SM 49	29°02,4′	32°19,2′	1659	1715–1815	1841	30.5.75	800	400	IKMT	650–0	24,28	3,0–4,4
SM 50	29°10,1′	32°19,8′		1927–1949		30.5.75	1 120	212	Bongo	†	24,00	1,56

TABLE 2

Station data for the second cruise, 17–26 May 1976

Station No.	*Position*		*Time*			*Date*	*Bottom Depth*	*Fishing Depth*	*Gear*	*Bathy-thermo-graph*	*Sea surface temp.*	*Ship's speed*
	Latitude	*Longitude*	*Start*	*Fishing*	*End*							
	°S	°E					m	m		m	°C	knots
SM 51S	26°51,7′	33°10,2′		1330–1336		18.5.76	710	45	Bongo	700–0	25,0	1,90
SM 51D	26°51,7′	33°10,2′		1344–1405		18.5.76	710	200	Bongo	700–0	25,0	1,56
SM 51N	26°51,7′	33°10,2′		—		18.5.76	710	0	Neuston	—	25,0	1,56
SM 52	26°51,7′	33°11,3′	1413	1433–1448	1511	18.5.76	720	720	Heavy dredge	—	24,9	0
SM 53	26°51,1′	33°12,5′	1530	1550–1605	1623	18.5.76	720	720	Biol. dredge	—	24,9	0
SM 54S	26°52,2′	33°20,6′		1824–1830		18.5.76	850	45	Bongo	††	23,9	1,73
SM 54D	26°52,2′	33°20,6′		1837–1903		18.5.76	850	200	Bongo	††	24,0	1,80
SM 54N	26°52,2′	33°20,6′		—		18.5.76	850	0	Neuston	—	24,0	1,80
SM 55	26°52,2′	33°21,1′	1950	2000–2005		18.5.76	840	251	RMT	788–0	24,3	2,50
				2011–2026	2055			400			24,3	*0
SM 56	26°53,6′	33°22,0′	2119	2147–2247	2319	18.5.76	980–1 050	397	RMT	1 000–0	24,7	2,60
SM 57S	27°09,1′	33°10,5′		0709–0715		19.5.76	1 000	45	Bongo	**1 000–640	24,68	1,63
SM 57D	27°09,1′	33°10,5′		0722–0743		19.5.76	1 000	200	Bongo	**1 000–640	25,00	1,72
SM 57N	27°09,1′	33°10,5′		—		19.5.76	1 000	0	Neuston	—	25,00	1,72
SM 58	27°09,7′	33°01,0′	0847	0915–1015	—	19.5.76	850–790	850–790	Beam trawl	—	24,75	2,19
SM 59S	27°10,2′	32°59,3′		1218–1224		19.5.76	820	45	Bongo	635–0	25,80	1,96
SM 59D	27°10,2′	32°59,3′		1230–1251		19.5.76	820	200	Bongo	635–0	25,83	2,00
SM 59N	27°10,2′	32°59,3′		—		19.5.76	820	0	Neuston	—	25,83	2,00
SM 60	27°09,6′	32°58,2′	1300	1323–1354	1420	19.5.76	800–810	800–810	Heavy dredge	—	24,83	0
SM 61	27°10,3′	32°58,7′	1433	1455–1510	1532	19.5.76	820	820	Biol. dredge	—	25,04	0

SM 62S	27°10,2′	33°10,3′		1818–1825		19.5.76	1 050	45	Bongo	††	25,11	1,20
SM 62D	27°10,2′	33°10,3′		1829–1854		19.5.76	1 050	209	Bongo	††	25,07	1,66
SM 62N	27°10,2′	33°10,3′		—		19.5.76	1 050	0	Neuston	—	25,07	1,66
SM 63	27°10,5′	33°14,5′	2000	2013–2116	2128	19.5.76	1 070	140	RMT	650–0	24,42	2,48
SM 64S	27°23,7′	32°57,5′		0636–0642		20.5.76	905	45	Bongo	650–0	25,02	1,53
SM 64D	27°23,7′	32°57,5′		0648–0708		20.5.76	905	200	Bongo	650–0	25,10	1,63
SM 64N	27°23,7′	32°57,5′		—		20.5.76	905	0	Neuston	—	25,10	1,63
SM 65	27°23,0′	32°57,0′	0740	0808–0853	0926	20.5.76	850–750	850–750	Beam trawl	—	25,13	1,98
SM 66	27°17,5′	32°54,1′	0937	0956–1100	1121	20.5.76	780–720	780–720	Beam trawl	—	25,10	0
SM 67	27°14,8′	32°54,6′	1144	1212–1242	1312	20.5.76	700–680	700–680	Agassiz trawl	—	25,15	0
SM 68S	27°12,2′	32°55,2′		1359–1404		20.5.76	670	45	Bongo	610–0	25,17	1,71
SM 68D	27°12,2′	32°55,2′		1412–1433		20.5.76	670	200	Bongo	610–0	25,18	1,76
SM 68N	27°12,2′	32°55,2′		—		20.5.76	670	0	Neuston	—	25,18	1,76
SM 69	27°12,2′	32°56,0′	1458	1525–1558	1622	20.5.76	660	660	Biol. dredge	—	25,17	0
SM 70S	27°23,0′	33°02,9′		1838–1844		20.5.76	1 050	45	Bongo	610–0	24,97	1,92
SM 70D	27°23,0′	33°02,9′		1848–1911		20.5.76	1 050	200	Bongo	610–0	24,97	2,01
SM 71	27°21,3′	33°03,9′	1954	2021–2055	2125	20.5.76	1 050	1 050	Heavy dredge	—	24,92	0
SM 72	27°17,8′	33°04,5′	2142	2206–2250	2319	20.5.76	1 050	1 050	Beam trawl	—	24,93	0
SM 73S	27°39,4′	32°53,5′		0631–0636		21.5.76	940	45	Bongo	650–0	24,49	1,80
SM 73D	27°39,4′	32°53,5′		0641–0702		21.5.76	940	200	Bongo	650–0	25,70	1,96
SM 74	27°38,6′	32°52,6′	0724	0757–0827	0906	21.5.76	860	860	Beam trawl	—	24,82	0
SM 75	27°36,2′	32°51,5′	0947	1026–1100	1142	21.5.76	920–820	920–820	Agassiz trawl	—	24,93	2,77

TABLE 2 (*continued*)

Station No.	*Position*		*Time*			*Date*	*Bottom Depth*	*Fishing Depth*	*Gear*	*Bathy-thermo-graph*	*Sea surface temp.*	*Ship's speed*
	Latitude	*Longitude*	*Start*	*Fishing*	*End*							
	°S	°E					m	m		m	°C	knots
SM 76S	27°37,7′	32°47,8′		1220–1226		21.5.76	760	45	Bongo	647–0	24,96	2,27
SM 76D	27°37,7′	32°47,8′		1232–1256		21.5.76	760	200	Bongo	647–0	24,99	1,93
SM 76N	27°37,7′	32°47,8′		—		21.5.76	760	0	Neuston	—	24,99	1,93
SM 77	27°31,6′	32°50,0′	1328	1350–1425	1448	21.5.76	780	780	Heavy dredge	—	24,89	0
SM 78	27°31,6′	32°50,0′	1513	1533–1604	1630	21.5.76	750	750	Biol. dredge	—	24,86	0
SM 79S	27°37,8′	33°00,5′		1841–1846		21.5.76	1 160	45	Bongo	650–0	24,53	1,53
SM 79D	27°37,8′	33°00,5′		1852–1917		21.5.76	1 160	200	Bongo	650–0	24,53	2,13
SM 80	27°39,0′	33°00,0′	2158	2221–2231 2250–2300	2312	21.5.76	1 180	0–359 & 127–0	Bongo	†	24,66	3,48
SM 81S	27°57,8′	32°52,7′		0626–0632		22.5.76	1 160	45	Bongo	650–0	24,41	1,93
SM 81D	27°57,8′	32°52,7′		0638–0701		22.5.76	1 160	200	Bongo	650–0	24,40	1,56
SM 82	27°58,2′	32°50,7′	—	0746–0848	—	22.5.76	960	439	RMT	†	24,62	3,20
SM 83	28°00,5′	32°46,4′	0936	1005–1113	1140	22.5.76	810–600	810–600	Beam trawl	—	24,46	1,78
SM 84S	27°58,9′	32°40,8′		1319–1325		22.5.76	620	45	Bongo	600–0	24,42	1,71
SM 84D	27°58,9′	32°40,8′		1330–1352		22.5.76	620	200	Bongo	600–0	24,46	1,45
SM 84N	27°58,9′	32°40,8′		—		22.5.76	620	0	Neuston	—	24,46	1,45
SM 85	27°59,5′	32°40,8′	1405	1420–1450	1520	22.5.76	550	550	Agassiz trawl	—	24,43	0
SM 86	27°59,5′	32°40,8′	1530	1539–1609	—	22.5.76	550	550	Heavy dredge	—	24,46	0
SM 87S	27°55,4′	32°55,2′		1846–1853		22.5.76	1 110	45	Bongo	630–0	24,53	1,73
SM 87D	27°55,4′	32°55,2′		1858–1920		22.5.76	1 110	200	Bongo	630–0	24,54	1,59
SM 87N	27°55,4′	32°55,2′		—		22.5.76	1 110	0	Neuston	—	24,54	1,59
SM 88	27°51,8′	32°55,8′	2006	2030–2044		22.5.76	1 140	94	RMT	†	24,61	2,94
				2056–2205	2226	22.5.76	1 140	297			24,63	3,02

SM 89S	28°10,3′	32°47,4′		0632–0638		23.5.76	980	45	Bongo	650–0	24,59	1,39
SM 89D	28°10,3′	32°47,4′		0642–0704		23.5.76	980	200	Bongo	650–0	24,61	1,80
SM 89N	28°10,3′	32°47,4′		—		23.5.76	980	0	Neuston	—	24,61	1,80
SM 90	28°09,8′	32°47,4′	0717	0739–0839	0909	23.5.76	940	940	Heavy dredge	—	24,62	0
SM 91	28°12,0′	32°45,7′	0919	0947–1046	1120	23.5.76	860–770	860–770	Beam trawl	—	24,65	1,58
SM 92	28°14,5′	32°40,6′	1143	1214–1314	1350	23.5.76	720–650	720–650	Beam trawl	—	24,64	0
SM 93S	28°15,8′	32°38,6′		1442–1446		23.5.76	630	40	Bongo	600–0	24,70	1,77
SM 93D	28°15,8′	32°38,6′		1452–1517		23.5.76	630	200	Bongo	600–0	24,72	1,72
SM 93N	28°15,8′	32°38,6′		—		23.5.76	630	0	Neuston	—	24,72	1,72
SM 94	28°16,3′	32°38,8′	1530	1549–1622	—	23.5.76	670	670	Biol. dredge	—	24,71	0
SM 95S	28°13,0′	32°49,2′		1856–1901		23.5.76	1 140	45	Bongo	650–0	24,47	1,99
SM 95D	28°13,0′	32°49,2′		1905–1926		23.5.76	1 140	200	Bongo	650–0	24,47	1,47
SM 95N	28°13,0′	32°49,2′		—		23.5.76	1 140	0	Neuston	—	24,47	1,47
SM 96	28°14,1′	32°49,6′	2011	2039–2110	2145	23.5.76	1 170	465	RMT	†	24,29	1,88
SM 97	28°13,4′	32°49,3′	2235	2250–2350	0014	23.5.76	1 100	467	IKMT	—	24,30	2,42
SM 98S	28°23,5′	32°43,1′		0632–0639		24.5.76	980	33	Bongo	650–0	24,28	1,45
SM 98D	28°23,5′	32°43,1′		0645–0705		24.5.76	980	200	Bongo	650–0	24,31	1,85
SM 99	28°23,5′	32°41,9′	0723	0749–0848	0922	24.5.76	920	920	Beam trawl	—	24,25	1,59
SM 100	28°24,8′	32°36,0′	0938	1004–1102	1126	24.5.76	640–630	640–630	Beam trawl	—	24,32	0
SM 101S	28°28,2′	32°34,4′		1204–1210		24.5.76	620	45	Bongo	600–0	24,44	2,02
SM 101D	28°28,2′	32°34,4′		1214–1236		24.5.76	620	200	Bongo	600–0	24,47	1,83
SM 102	28°29,4′	32°35,2′	1246	1304–1406	—	24.5.76	730–715	730–715	Agassiz trawl	—	24,47	0
SM 103	28°31,7′	32°34,0′	1435	1456–1526	1544	24.5.76	680	680	Biol. dredge	—	24,50	0
SM 104S	28°25,6′	32°44,5′		1833–1838		24.5.76	1 100	45	Bongo	††	24,25	1,37
SM 104D	28°25,6′	32°44,5′		1842–1903		24.5.76	1 100	200	Bongo	††	24,29	1,62

TABLE 2 (*continued*)

Station No.	*Position*		*Time*			*Date*	*Bottom Depth*	*Fishing Depth*	*Gear*	*Bathy-thermo-graph*	*Sea surface temp.*	*Ship's speed*
	Latitude	*Longitude*	*Start*	*Fishing*	*End*							
	°S	°E					m	m		m	°C	knots
SM 105	28°26,0′	32°44,0′	1947	2007–2017 2027–2035 2045–2115	2209	24.5.76	1 220–1 300	341 553 775	RMT	656–0	‡24,21	‡2,98
SM 106S	28°37,4′	32°41,5′		0628–0636		25.5.76	1 100	45	Bongo	650–0	24,13	1,57
SM 106D	28°37,4′	32°41,5′		0640–0702		25.5.76	1 100	200	Bongo	650–0	24,17	1,69
SM 107	28°37,8′	32°38,4′	0723	0758–0858	0940	25.5.76	1 200–1 000	1 200–1 000	Beam trawl	—	24,20	0
SM 108	28°38,5′	32°39,0′	1222	1251–1352	1434	25.5.76	1 100–1 140	1 100–1 140	Beam trawl	—	24,48	0
SM 109	28°41,0′	32°36,8′	1449	1523–?	—	25.5.76	1 300	1 300	Biol. dredge	—	24,41	0
SM 110S	28°49,7′	32°32,7′		1829–1835		25.5.76	1 050	45	Bongo	650–0	24,40	1,80
SM 110D	28°49,7′	32°32,7′		1838–1901		25.5.76	1 050	200	Bongo	650–0	24,40	1,77
SM 110N	28°49,7′	32°32,7′		—		25.5.76	1 050	0	Neuston	—	24,40	1,77
SM 111	28°52,1′	32°31,6′	1950	2015–2046	2118	25.5.76	1 150–1 400	514	RMT	†	24,35	3,23
SM 112	28°57,0′	32°32,5′	2141	2210–2242	—	25.5.76	1 280–1 120	441–488	RMT	—	24,27	2,78
SM 113(i)	29°11,0′	31°42,8′		5 min		26.5.76	40	0	Neuston	—	22,22	5,74
SM 113(ii)	29°11,0′	31°42,8′		7 min		26.5.76	40	0	Neuston	—	22,33	5,41
SM 114	29°10,9′	31°42,8′	0611	0619–?	—	26.5.76	40	40	Beam trawl	—	—	—
SM 115	29°12,9′	31°40,8′	0708	0714–0746	0750	26.5.76	40–42	40–42	Beam trawl	—	22,40	1,97

Table 3

Temperatures at selected depths, as obtained from bathythermograph profiles.

Depth	0 m	10 m	20 m	30 m	40 m	50 m	60 m	75 m	100 m	200 m	300 m	400 m	500 m	600 m	700 m	800 m	900 m	1 000 m
Station No.	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C
SM 2	25,10	25,02	24,84	24,65	24,22	24,10	23,85	21,70	19,20	15,25	12,77	11,55	9,70	—	—	—	—	—
4	—	24,64	24,62	24,41	24,23	24,18	24,08	22,40	20,56	15,81	13,73	11,91	10,72	9,30	7,31	5,85	—	—
5	23,53	23,51	23,48	23,31	23,08	22,24	21,81	21,30	19,13	15,50	12,92	11,60	10,50	9,94	8,51	6,32	—	—
6	24,23	24,11	23,85	23,75	23,30	22,10	21,10	20,40	18,64	14,82	12,55	11,05	9,71	8,06	6,39	5,31	—	—
8	23,82	23,81	23,75	23,31	23,00	22,63	21,67	20,00	18,82	15,24	13,05	11,32	9,91	8,30	6,30	5,29	—	—
11	23,73	23,73	23,71	23,60	23,06	22,18	21,69	20,23	19,05	14,90	13,12	11,19	—	—	—	—	—	—
13	23,63	23,63	23,61	23,55	23,10	22,86	21,56	20,88	19,27	15,65	12,90	11,57	—	—	—	—	—	—
14	23,46	23,46	23,45	23,41	23,28	22,50	21,55	20,53	18,80	15,18	12,77	11,11	9,66	7,81	5,70	—	—	—
17	24,20	24,09	24,05	23,94	23,82	23,71	22,86	20,70	19,90	14,67	12,70	10,20	—	—	—	—	—	—
18	24,37	24,31	24,09	23,50	22,99	22,80	22,27	21,52	19,25	15,61	12,93	11,59	10,34	9,21	7,72	5,70	—	—
21,	24,29	24,29	24,26	24,22	23,99	22,40	21,66	20,30	18,59	14,94	12,95	11,42	10,03	—	—	—	—	—
24	24,47	24,32	24,29	24,22	24,12	22,05	20,95	19,46	18,16	14,12	—	—	—	—	—	—	—	—
25	22,60	22,53	22,20	21,93	21,60	21,41	21,15	20,34	19,18	15,40	13,19	—	—	—	—	—	—	—
27	24,12	24,12	24,11	24,08	23,75	21,80	20,55	19,57	18,22	14,82	12,81	—	—	—	—	—	—	—
28	24,19	24,13	24,10	23,92	22,91	21,45	20,10	18,93	17,97	14,43	12,58	11,40	10,03	—	—	—	—	—
30	24,27	24,19	24,15	24,05	23,82	21,67	20,12	19,26	18,45	14,52	12,50	11,27	10,12	—	—	—	—	—
34	24,39	24,39	24,37	24,30	23,82	22,43	22,08	21,47	20,44	15,48	13,09	11,52	10,47	9,28	—	—	—	—
36	24,31	24,32	24,32	24,28	23,63	22,50	21,40	19,51	18,19	14,69	12,31	10,98	10,00	—	—	—	—	—
41	24,40	24,33	24,30	24,30	24,28	24,24	24,07	22,13	19,01	15,26	12,71	11,22	10,16	9,01	—	—	—	—
45	24,27	24,27	24,24	24,12	23,03	22,29	21,68	20,22	17,51	14,31	12,18	10,90	9,74	—	—	—	—	—
46	24,34	24,34	24,34	24,33	24,31	24,24	23,85	22,26	19,26	14,89	13,05	11,41	10,37	9,31	—	—	—	—
47	24,16	24,16	24,13	24,05	23,41	23,22	22,73	21,20	19,70	15,63	13,32	11,58	10,37	—	—	—	—	—

TABLE 3 (*continued*)

Depth	0 m	10 m	20 m	30 m	40 m	50 m	60 m	75 m	100 m	200 m	300 m	400 m	500 m	600 m	700 m	800 m	900 m	1 000 m
Station No.	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C	Temp. °C
49	24,00	24,00	23,99	23,71	23,53	23,31	22,82	22,06	19,41	15,63	12,91	11,50	10,22	9,00	—	—	—	—
51	—	24,52	24,41	24,36	24,30	24,16	22,20	19,45	17,10	12,88	10,81	9,82	8,23	5,48	—	—	—	—
55	—	23,51	23,40	22,83	22,06	20,85	20,14	18,41	16,43	12,84	10,51	9,62	8,22	6,12	5,18	—	—	—
56	—	24,46	24,46	24,45	24,40	24,37	24,32	23,50	19,62	14,01	10,83	8,68	7,12	6,20	4,90	4,02	3,33	3,10
57	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4,75	4,00	3,44	—
59	—	—	—	—	—	25,41	25,19	24,30	21,99	15,00	11,34	9,00	6,87	5,50	—	—	—	—
63	—	25,90	25,89	25,61	25,58	25,29	24,60	23,05	20,90	14,15	10,61	8,21	6,54	5,54	—	—	—	—
64	—	25,94	25,96	25,98	26,00	25,75	25,06	23,92	21,35	13,90	10,51	9,10	7,71	6,02	—	—	—	—
68	25,92	25,92	25,81	25,46	25,18	24,68	24,50	23,64	22,40	14,33	10,68	8,72	7,91	7,06	—	—	—	—
70	25,74	25,78	25,78	25,79	25,78	25,79	25,79	25,71	20,74	14,18	11,14	8,72	7,00	6,50	—	—	—	—
73	25,38	25,35	25,38	25,39	25,40	25,30	25,11	22,40	20,31	15,14	11,90	9,97	8,51	7,16	—	—	—	—
76	25,70	25,73	25,73	25,70	25,69	25,59	24,25	21,80	20,90	15,13	12,20	10,52	8,69	7,43	—	—	—	—
79	25,23	25,24	25,26	25,27	25,11	25,11	25,04	24,15	22,07	14,40	11,79	9,40	7,81	6,28	—	—	—	—
81	25,21	25,26	25,25	25,24	25,20	25,20	25,05	24,45	20,86	15,40	12,83	10,49	9,55	7,80	—	—	—	—
84	25,20	25,22	25,21	25,12	25,00	24,99	24,90	23,00	20,98	15,68	12,92	10,85	9,18	8,00	—	—	—	—
87	25,39	25,40	25,41	25,41	25,41	25,40	25,38	25,11	22,76	15,39	12,30	9,56	7,60	6,90	—	—	—	—
89	25,51	25,50	25,51	25,53	25,50	25,49	25,40	23,95	20,70	15,51	13,10	11,10	9,61	8,61	—	—	—	—
93	25,42	25,36	25,31	25,30	25,21	25,01	24,45	22,46	19,44	15,72	12,90	11,02	8,80	7,84	—	—	—	—
95	25,26	25,26	25,20	25,18	25,15	25,12	25,09	24,63	22,18	16,29	13,49	11,50	9,82	8,48	—	—	—	—
98	25,07	25,09	25,10	25,08	25,05	24,88	24,11	23,80	21,20	16,59	13,28	11,30	9,87	9,12	—	—	—	—
101	25,15	25,10	25,08	25,06	25,05	25,01	24,84	22,64	20,77	16,26	13,03	10,86	9,88	8,52	—	—	—	—
105	24,97	24,98	24,97	24,96	24,95	24,92	24,90	23,50	21,29	16,45	14,09	12,21	10,62	9,13	—	—	—	—
106	24,95	24,96	24,96	24,97	24,96	24,91	24,73	22,85	21,41	16,47	14,20	12,28	10,94	9,46	—	—	—	—
110	25,09	25,09	25,08	25,00	24,93	24,79	23,70	22,15	20,60	16,15	13,61	12,12	10,68	9,02	—	—	—	—

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